

NATIONAL RESEARCH

And the
Nation's State
Departments
of
Transportation

A pause to remember why national research has always been important

- The world is an ever changing place and keeping up requires constant research and innovation in practice
- Problems facing a state DOTs are rarely unique – okay Alaska's need to train moose to use an wildlife underpass was a new one for me!
- Pooling resources and experiences can lead better research results

Why national research is increasingly important

- Funding is shrinking, becoming less reliable, and the types of projects to spend that money on are increasing
- Research can help you spend money in a more optimum way.
- The types of issues being raised by decision makings and the public are evolving
- Research and your peers can also help you respond to those concerns and questions
- As the questions become more complex – quick, focused, one-off research is becoming less relevant
- And finally a weird one.....

Why national research is increasingly important – the weird one

- Employee recruitment and retention are becoming major issues in the transportation field
- Moving into the next 50 years your agency will need –
 - employees that are good problem solvers
 - creative and innovative employees
 - employees that can communicate with your decision makers and the public
 - Employees with a network that supports all of the above
- How do find and retain this type of employee? Research shows that the following conditions are critical
 - autonomy
 - mastery
 - purpose

Getting people involved in national research

- What are the benefits of having DOT employees serve on national research panels?
 - will provide opportunities for mastery and purpose
 - your staff will meet their peers, academics, industry staff, consultants, federal staff....
 - your agency will have a seat at the table
- What are healthy participation levels, either for individuals or for agencies (i.e. how many employees and how many panels)?
 - if the research topic is a priority for your state, you should be there
 - TRB looks for a diversity in opinion, so we really encourage new faces
- How do we get staff interested in serving on national research panels?
 - explain the opportunity, level of effort, and the benefits
 - This activity is a good accomplishment for performance reviews and a good resume addition

Getting people involved in national research (cont.)

- What is the role of the Research Program in getting state DOT employees involved in national research panels?
 - in a word – critical
 - no national research organization has a connection to all of your experts
 - finding new contributors is critical to our continued viability and only you know these folks
- How can we assure management that staff time and efforts to participate on national committees are beneficial to the agency?
 - some states track (CA and UT)
 - a description of what the staff will bring back – best practices, other states' experiences with the topic, academic research on the topic, consultants or vendors with experience with the topic, the beginnings of a peer network to consult on the topic, etc.
- How can we foster better cooperation and information sharing between AASHTO committees and TRB / CRP committees?
 - the connections between TRB standing committees and AASHTO vary, but typically are fairly strong
 - the NCHRP program is the AASHTO research and the panel members are predominantly state DOT staff, not sure how much stronger a connection could be made

Questions I might have asked

- What have national research programs done to quantify the benefits of state DOT staff involvement?
- What material could national research programs develop to explain the benefit of participating in their programs? Should different versions of the material be developed for different target audiences?
- Collectively transportation research programs at all levels of government and at NGOs have made a huge impact on our nations economy, environment, and security. Are we doing a good job of explaining the critical role the research panels have played in this impact?

Getting projects submitted and accepted for national research

- What are the benefits of having DOT-submitted projects accepted for national research?
 - even the process of writing the research statement can help the agency define the problem
 - having a state issue researched at the national level brings a whole new group of experts to consider the issue
- What are methods that state DOT Research Programs can use to generate ideas that would be appropriate for national research?
 - what questions are your leadership, decision-makers, and public asking?
 - events your staff attend, that you organize, webinars, podcasts – any place that you hear someone say “we don’t know how to do this”
 - TRB standing committees have developed research needs statements at the RNS
 - This is a great task for a “newbie”! We have our new staff keep a list of things that don’t make sense to them, things we should be able to do better, new tools we should consider, etc.

Getting projects submitted and accepted for national research (cont.)

- Should state DOTs actively seek out and support national research project submittals from researchers in their states?
 - this is a great source, with one caveat, you must always be sure that the topic is critical to your mission not their tenure
 - really the more perspectives the better. One of my favorite quotes is “You can learn something from almost anyone, even a giant purple dinosaur or a cookie eating monster.”
 - researchers can also suggest new research programs that could help with transportation research
- What are the roles in submitting national research ideas for AASHTO committees?
 - AASHTO committees can endorse or develop their own statements to submit
 - These statements are given priority

Getting projects submitted and accepted for national research

- Should state DOTs actively lobby for support of their submitted projects?
 - Lobby is probably not the best approach.
 - Better approaches might be
 - getting AASHTO committee endorsement
 - reaching out to other state DOTs to support individual statements
 - make sure your RAC member understands the topic and the research statement so they can answer questions
 - Spend time writing a really good research statement – one that is well written, explains the problem for those not experts in the area, and clearly state how many state DOTs could benefit from the research

Questions I might have asked

- Are there national research programs the transportation community should be utilizing?
- How can states increase and improve their interact with the UTCs?
- Are there good models for identifying what research should be conducted at the state level versus the national level?
- Are there good models for transiting a research topic from a state program to a national program?
- Are there good models for engaging department leadership to identify research needs and to prioritize research statements?

CLOSING

- Thank you for the opportunity to think about these issues and I look forward to hearing your suggestions and questions.
- The issues of dissemination and implementation are very critical to TRB and our profession. Tomorrow should be a very interesting day.
- As you might have surmised by now, I am very passionate about research and providing transportation professionals a chance to learn from each other. Feel free to contact me any time you want to talk more about these issues! I appreciate the chance to learn from discussions with state DOT staff on these issues.

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